

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A method of encoding a video signal representing a sequence of pictures, the method comprising comparing a first picture with a second picture, calculating a measure of the similarity between the first and the second pictures, comparing the measure of similarity with a predetermined criterion of similarity and, when the measure of similarity does not meet the predetermined criterion of similarity, outputting an indicator indicating that a non-temporally predictive error concealment method should be used by a subsequent decoder and, when the measure of similarity meets the predetermined criterion of similarity, outputting an indicator indicating that a temporally predictive error concealment method should be used by a subsequent decoder, wherein the indicator is included in a picture header, and

wherein the video signal is encoded according to the H.263 standard and the indicator is included in the Supplemental Enhancement Information.

2. (Original) A method according to claim 1, wherein the indicator is updated when the measure of similarity does not meet the predetermined criterion of similarity.

3. – 14. (Cancelled)

15. (Previously Presented) A method of encoding a video signal representing a sequence of pictures to form an encoded video signal, the method comprising selecting an encoding mode for a picture of the sequence and providing an encoding mode indicator in the encoded video signal to indicate the encoding mode of the picture, the encoding mode indicator to be used in a corresponding decoding process for the picture, determining a separate error concealment method indicator for the picture or a part thereof to indicate a type of error concealment method to be used in the corresponding decoding process for the picture or said part thereof when an error occurs, and providing the error concealment method indicator in the encoded video signal.

16. (Previously Presented) A method according to claim 15, comprising comparing a first picture of the sequence with a second picture of the sequence, calculating a measure of similarity between the first and second pictures, comparing the measure of similarity with a predetermined criterion of similarity, and, when the measure of similarity does not meet the predetermined criterion of similarity, providing an error concealment method indicator indicating that a non-temporally predictive error concealment method should be used in the corresponding decoding process for the picture when an error occurs and, when the measure of similarity meets the predetermined criterion of similarity, providing an error concealment method indicator indicating that a temporally predictive error concealment method should be used in the corresponding decoding process for the picture when an error occurs.

17. (Previously Presented) A method according to claim 16, wherein the error concealment method indicator is updated when the measure of similarity does not meet the predetermined criterion of similarity.

18. (Previously Presented) A method according to claim 15 wherein the error concealment method indicator is included in a picture header.

19. (Currently Amended) A method according to claim ~~48~~15 wherein the video signal is encoded according to the H.263 standard, and the error concealment method indicator is included in Supplemental Enhancement Information of the standard.

20. (Previously Presented) A method of encoding a video signal according to claim 16, wherein, when the measure of similarity does not meet the predetermined criterion, the error concealment method indicator is updated, and, when the measure of similarity meets the predetermined criterion, the error concealment method indicator is unchanged.

21. (Previously Presented) A method of decoding an encoded video signal representing a sequence of pictures, the method comprising receiving an encoded video signal, identifying for a picture to be decoded an encoding mode indicator to determine an encoding mode of the picture, and identifying a separate error concealment method indicator indicating a type of error concealment method to be used in a decoding process for the picture or a part thereof when an error occurs,

and applying an error concealment method in accordance with the type indicated by the error concealment method indicator in the decoding process for the picture or said part thereof when an error occurs.

22. (Previously Presented) A method of decoding according to claim 21, wherein the error concealment method indicator represents a measure of similarity between a first picture of the video sequence and a second picture of the video sequence and, wherein the method comprises applying a temporally predictive error concealment when the error concealment method indicator is the same as that of a previously received picture, and, applying a spatial error concealment method when the error concealment method indicator is the different from that of a previously received picture.

23. (Previously Presented) A video encoder for encoding a video signal representing a sequence of pictures to form an encoded video signal, the video encoder being arranged to select an encoding mode for a picture of the sequence and provide an encoding mode indicator in the encoded video signal to indicate the encoding mode of the picture, the encoding mode indicator to be used in a corresponding decoding process for the picture, to determine a separate error concealment method indicator for the picture or a part thereof to indicate a type of error concealment method to be used in the corresponding decoding process for the picture or said part thereof when an error occurs, and to provide the error concealment method indicator in the encoded video signal.

24. (Previously Presented) A video encoder according to claim 23, wherein the encoder is arranged to compare a first picture of the sequence with a second picture of the sequence, calculate a measure of similarity between the first and second pictures, compare the measure of similarity with a predetermined criterion of similarity, and, when the measure of similarity does not meet the predetermined criterion of similarity, to provide an error concealment method indicator indicating that a non-temporally predictive error concealment method should be used in the corresponding decoding process for the picture when an error occurs and, when the measure of similarity meets the predetermined criterion of similarity, to provide an error concealment method indicator indicating that a temporally predictive error concealment method should be used in the corresponding decoding process for the picture when an error occurs.

25. (Previously Presented) A video encoder according to claim 24, wherein the video encoder is arranged to update the error concealment method indicator when the measure of similarity does not meet the predetermined criterion, and to leave the error concealment method indicator unchanged when the measure of similarity meets the predetermined criterion.

26. (Previously Presented) A video decoder for decoding an encoded video signal representing a sequence of pictures, the decoder arranged to receive the encoded video signal, to identify, for a picture to be decoded, an encoding mode indicator to determine an encoding mode of the picture, and to identify a separate error concealment method indicator indicating a type of error concealment method to

be used in a decoding process for the picture or a part thereof when an error occurs, and to apply an error concealment method in accordance with the type indicated by the error concealment method indicator in the decoding process for the picture or said part thereof when an error occurs.

27. (Previously Presented) A portable radio communications device including at least one of a video encoder for encoding a video signal representing a sequence of pictures to form an encoded video signal and a video decoder for decoding an encoded video signal representing a sequence of pictures,

wherein the video encoder is arranged to select an encoding mode for a picture of the sequence and provide an encoding mode indicator in the encoded video signal to indicate the encoding mode of the picture, the encoding mode indicator to be used in a corresponding decoding process for the picture, to determine a separate error concealment method indicator for the picture or a part thereof to indicate a type of error concealment method to be used in the corresponding decoding process for the picture or said part thereof when an error occurs, and to provide the error concealment method indicator in the encoded video signal, and

wherein the video decoder is arranged to receive an encoded video signal, to identify for a picture to be decoded an encoding mode indicator to determine an encoding mode of the picture, and to identify a separate error concealment method indicator indicating a type of error concealment method to be used in the decoding process for the picture or a part thereof when an error occurs, and to apply an error concealment method in accordance with the type indicated by the error concealment

method indicator in the decoding process for the picture or said part thereof when an error occurs.

28. (Previously Presented) A encoded video signal representing a sequence of pictures comprising an encoding mode indicator in the encoded video signal to indicate the encoding mode of a picture, the encoding mode indicator to be used in a corresponding decoding process for the picture, and a separate error concealment method indicator for the picture or a part thereof to indicate a type of error concealment method to be used in the corresponding decoding process for the picture or said part thereof when an error occurs.

29. (New) A method according to claim 16, wherein the sequence of pictures includes a number of different scenes, each scene comprising pictures which meet the predetermined criterion of similarity, and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having the same value for all pictures of a scene, the scene identifier having a different value for each different scene.

30. (New) A method according to claim 16, wherein the sequence of pictures includes a number of different scenes, each scene comprising pictures which meet the predetermined criterion of similarity, and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having one of two values with pictures from adjacent scenes having non-identical scene indicator values.

31. (New) A method according to claim 15, wherein the error concealment method indicator is included in a picture segment header and/or a macroblock header.

32. (New) A method according to claim 15, wherein the error concealment method indicator indicates a type of error concealment to be applied for a specified rectangular area of a picture.

33. (New) A method according to claim 32, comprising providing multiple error concealment method indicators for a picture, each error concealment method indicator specifying a type of error concealment to be applied for one of a plurality of non-overlapping rectangular areas of the picture.

34. (New) A method according to claim 21, wherein the error concealment method indicator is included in a picture header.

35. (New) A method according to claim 21, wherein the video signal is encoded according to the H.263 standard and the error concealment method indicator is included in the Supplemental Enhancement Information.

36. (New) A method according to claim 21, wherein the sequence of pictures includes a number of different scenes and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having

the same value for all pictures of a scene, the scene identifier having a different value for each different scene.

37. (New) A method according to claim 21, wherein the sequence of pictures includes a number of different scenes and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having one of two values with pictures from adjacent scenes having non-identical scene indicator values.

38. (New) A method according to claim 21, wherein the error concealment method indicator is included in a picture segment header and/or a macroblock header.

39. (New) A method according to claim 21, wherein the error concealment method indicator indicates a type of error concealment to be applied for a specified rectangular area of a picture.

40. (New) A method according to claim 39, wherein multiple error concealment method indicators are provided for a picture, each error concealment method indicator specifying a type of error concealment to be applied for one of a plurality of non-overlapping rectangular areas of the picture.

41. (New) A method according to claim 36, wherein when an error occurs when decoding a picture, the method comprises comparing a scene indicator for the

picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is the same as the scene indicator for the temporally neighboring correctly decoded picture, applying a temporally predictive error concealment algorithm in the decoding process for the picture.

42. (New) A method according to claim 37, wherein when an error occurs when decoding a picture, the method comprises comparing a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is the same as the scene indicator for the temporally neighboring correctly decoded picture, applying a temporally predictive error concealment algorithm in the decoding process for the picture.

43. (New) A method according to claim 36, wherein when an error occurs when decoding a picture, the method comprises comparing a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is different from the scene indicator for the temporally neighboring correctly decoded picture, applying a spatial error concealment method in the decoding process for the picture.

44. (New) A method according to claim 37, wherein when an error occurs when decoding a picture, the method comprises comparing a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is different from the scene indicator for the

temporally neighboring correctly decoded picture, applying a spatial error concealment method in the decoding process for the picture.

45. (New) An encoder according to claim 23, wherein the encoder is arranged to include the error concealment method indicator in a picture header.

46. (New) An encoder according to claim 23, wherein the encoder is arranged to encode the video signal according to the H.263 standard and to include the error concealment method indicator in the Supplemental Enhancement Information.

47. (New) An encoder according to claim 24, wherein the sequence of pictures includes a number of different scenes, each scene comprising pictures which meet the predetermined criterion of similarity, and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having the same value for all pictures of a scene, the scene identifier having a different value for each different scene.

48. (New) An encoder according to claim 24, wherein the sequence of pictures includes a number of different scenes, each scene comprising pictures which meet the predetermined criterion of similarity, and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having one of two values with pictures from adjacent scenes having non-identical scene indicator values.

49. (New) An encoder according to claim 23, wherein the encoder is arranged to include the error concealment method indicator in a picture segment header and/or a macroblock header.

50. (New) An encoder according to claim 23, wherein the error concealment method indicator indicates a type of error concealment to be applied for a specified rectangular area of a picture.

51. (New) An encoder according to claim 50, wherein the encoder is arranged to provide multiple error concealment method indicators for a picture, each error concealment method indicator specifying a type of error concealment to be applied for one of a plurality of non-overlapping rectangular areas of the picture.

52. (New) A decoder according to claim 26, wherein the error concealment method indicator is included in a picture header.

53. (New) A decoder according to claim 26, wherein the video signal is encoded according to the H.263 standard and the error concealment method indicator is included in the Supplemental Enhancement Information.

54. (New) A decoder according to claim 26, wherein the sequence of pictures includes a number of different scenes and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having

the same value for all pictures of a scene, the scene identifier having a different value for each different scene.

55. (New) A decoder according to claim 26, wherein the sequence of pictures includes a number of different scenes and the error concealment method indicator is a scene identifier associated with the scenes, the scene identifier having one of two values with pictures from adjacent scenes having non-identical scene indicator values.

56. (New) A decoder according to claim 26, wherein the error concealment method indicator is included in a picture segment header and/or a macroblock header.

57. (New) A decoder according to claim 26, wherein the error concealment method indicator indicates a type of error concealment to be applied for a specified rectangular area of a picture.

58. (New) A decoder according to claim 57, wherein multiple error concealment method indicators are provided for a picture, each error concealment method indicator specifying a type of error concealment to be applied for one of a plurality of non-overlapping rectangular areas of the picture.

59. (New) A decoder according to claim 54, wherein when an error occurs when decoding a picture, the decoder is arranged to compare a scene indicator for

the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is the same as the scene indicator for the temporally neighboring correctly decoded picture, the decoder is arranged to apply a temporally predictive error concealment algorithm in the decoding process for the picture.

60. (New) A decoder according to claim 55, wherein when an error occurs when decoding a picture, the decoder is arranged to compare a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is the same as the scene indicator for the temporally neighboring correctly decoded picture, the decoder is arranged to apply a temporally predictive error concealment algorithm in the decoding process for the picture.

61. (New) A decoder according to claim 54, wherein when an error occurs when decoding a picture, the decoder is arranged to compare a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded picture and, if the scene indicator for the picture is different from the scene indicator for the temporally neighboring correctly decoded picture, the decoder is arranged to apply a spatial error concealment method in the decoding process for the picture.

62. (New) A decoder according to claim 55, wherein when an error occurs when decoding a picture, the decoder is arranged to compare a scene indicator for the picture with a scene indicator for a temporally neighboring correctly decoded

picture and, if the scene indicator for the picture is different from the scene indicator for the temporally neighboring correctly decoded picture, the decoder is arranged to apply a spatial error concealment method in the decoding process for the picture.